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09/201,867	11/30/98	TAKAMI	HIT2944

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EXAMINER

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ART UNIT	PAPER NUMBER
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2765

DATE MAILED: 03/13/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/201,867

Applicant(s)

Takami Et. Al.

Examiner
Geoffrey Akers

Group Art Unit
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☒ Responsive to communication(s) filed on Nov 30, 1998

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1-22 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-22 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☒ The drawing(s) filed on 11/30/98 is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☒ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☒ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____.

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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DETAILED ACTION

1. Claims 1-22 have been examined.

Specification

2. The abstract of the disclosure is objected to because it contains grammatical errors. Correction is required. See MPEP § 608.01(b). Specifically, the phrase “electronic money” should not be used so redundantly in the first two sentences. Line 10, “same” should specifically delineate the noun. Line 13, has a misspelled word “about”. Line 15 “and such” is an ambiguous term. Line 16 delete the second use of “control” as this is redundant usage. Line 24 employs redundant use of the word “control”. Delete this second usage. The same principle applies to line 25.

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-4, 7 and 10-22 are rejected under 35 U.S.C. 102(b) as being unpatentable over Jones et. al (US Pat. No. 5,632,547).
4. As per claim 1, Jones teaches an electronic money information transaction system comprising:
an IC card storing electronic money information, a terminal unit for writing electronic money information into and reading electronic money information from the IC card (col 2 line 12- col 4 line 5)

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an external connection terminal for connecting the terminal unit to a communication line(col 5 line 27-line 63)

an external information processor for processing data provided by the terminal unit(col 4 lines 6-31)

said terminal unit comprising a data modulating-demodulating means having a first connection terminal connected to the communication line, a system apparatus connected to the second connection terminal by the communication line, a data processing means for processing electronic money information read from or to be written into the IC card, and a switching means for selectively connecting the second connection terminal of the modulating-demodulating means to the data processing means or the external information processing means(col 4 line 6-line 13).

wherein the terminal unit is provided with a control means for controlling at least the switching means the control means controls the switching means to select the data processing means and to connect the data processing means through the data modulating-demodulating means to the communication line with an electronic money information transaction instruction is given thereto to enable the system apparatus and the IC card to exchange electronic money information through the communication line (col 4 lines 1-31)

5. As per claim 2, Jones teaches an electronic money information transaction system according to claim 1, wherein at least an electronic money information transaction start instruction to be given to the control means to instruct the control means to start electronic

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money information transactions is provided by the external information processor. (col 3 lines 4-10)

6. As per claim 3, Jones teaches an electronic money information transaction system according to claim 1, wherein the terminal unit further comprises an input means for entering inputs to the control means, and the electronic money information transaction start instructiuon is provided by the input means(col 5 lines 45-52)

7. As per claim 4, Jones teaches an electronic money information transaction system according to claim 1, wherein the terminal unit further comprises a power circuit provided with an electric energy storage means(col 5 lines 39-41)

8. As per claim 7, Jones teaches an electronic money information transaction system according to claim 4 further comprising a power receiving means for receiving power from an external power source, and a selecting means for selecting the power receiving means or the power circuit;(col 2 lines 15-32)

Wherein the selecting means selects the power receiving means to apply an output voltage of the power receiving means as supply voltage to the terminal unit in an ordinary state, and selects the power circuit as supply voltage to the terminal unit when the output voltage of the power receiving means drops below a predetermined value (col 5 lines 39-41)

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9. As per claim 10, Jones teaches an electronic money information transaction system according to claim 1, wherein the external information processor comprises a display capable of displaying image formation(Figures 6, element 15 and Figure 7, element 22)

10. As per claim 11, Jones teaches a terminal device for use in an electronic money information transaction system, comprising:

an IC card storing electronic money information(col 5 lines 53-59)

a terminal unit for writing electronic money information into and reading electronic money information from the IC card(col 5 lines 53-64)

an external connection terminal for connecting the terminal unit to a communication line connected to an external system apparatus(col 5 lines 38-39)

A data modulating-demodulating means having a first connection terminal connected to the communication line(col 4 lines 6-9)

a data processing means for processing electronic money information read from or to be written into the IC card(col 5 lines 36-52)

a switching means for selectively connecting a second connection terminal of the modulating demodulating means to the data processing means or an external information processing means for processing data provided by the terminal unit(col 5 line 36-52)

Wherein the terminal unit is provided with a control means for controlling at least the switching means, the control means controls the switching means to select the data processing means and connects the data processing means through the data modulating-demodulating means

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to the communication line when an instruction to carry out electronic money information transactions is given to enable the system apparatus and the IC card to exchange electronic money information through the communication line(col 5 lines 45-47)

11. As per claim 12, Jones teaches an electronic money information transacting method to be carried by an electronic money information transaction system comprising:

An IC card storing electronic money information;(col 2 lines 37-47)

a terminal unit for writing electronic money information into and reading electronic money information from an IC card(col 5 lines 41-52)

an external connection terminal for connecting the terminal unit to a communication line to an external system apparatus(col 5 lines 37-41)

a data modulating-demodulating means having a first connection terminal connected to the communication line(col 4 line 6-13)

a data processing means for processing electronic money information read from or to be written into the IC card (col 5 lines 53-55)

a switching means for selectively connecting a second connection terminal of the modulating-demodulating means to the data processing means or an external information processing means or an external information processing means for processing data provided by the terminal unit (col 5 lines 36-55)

wherein the terminal unit is provided with a control means for controlling at least the switching means, and the electronic money information transacting method has the step of making

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a decision according to at least an instruction provided by the control means as to whether electronic information applied to the second terminal of the data modulating-demodulating means is to be transferred to the external information processing means or to be transferred to the data processing means, and enables the system apparatus and the IC card to exchange electronic money information through the communication line.(col 5 lines 39-41)

12. As per claim 13, Jones teaches an electronic money information transaction system comprising :

An IC card storing electronic money information(col 5 lines 41-42)

a terminal unit for writing electronic money information into and reading electronic money information from the IC card(col 5 lines 53-55)

An external information processor for processing data provided by the terminal unit(col 5 lines 45-52)

a data modulating-demodulating means having a first connection terminal connected to the communications line(col 4 lines 6-13)

a system apparatus connected to one side through the communication line(col 4 lines 14-19)

said terminal unit having a data processing means for processing electronic money information read from or to be written into the IC card, and a switching means for selectively connecting a second communication terminal of the modulating-demodulating means to the data processing means or the external information processing means(col 5 lines 36-52)

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Characterized in that said terminal unit comprises a data processing means for processing electronic money information read from or to be written into the IC card; an information processing means connected to the data processing means; a switching means connected to the data processing means; a switching means for selecting the information processing means or the external information processing means; a data modulating-demodulating means having a first connection terminal connected to the communication line, and a second terminal connected to the switching means, and capable of being selectively connected to the data processing means or the external information processor by the switching means and a data monitoring means for monitoring the output of the data modulating-demodulating means when the data modulating-demodulating means is connected to the external information processor (col 5 line 53-col 6 line 42)

wherein the information processing means controls operations for writing an information signal indicating the electronic money information into or reading the same from the IC card through the data processing means, the switching means and the data modulating-demodulating means, and a signal instructing the switching means to execute switching control is transmitted at least once by the communication line(col 5 lines 53-col 6 line 12)

13. As per claim 14, Jones teaches an electronic money information transaction system according to claim 13, wherein the control means is connected to the data processing means, and the control means is capable of controlling the switching means through the data processing means and the information processing means(col 4 lines 6-18)

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14. As per claim 15, Jones teaches an electronic money information transaction system according to claim 14, wherein the data processing means and the information processing are disposed with a space formed between, and the information signal is transmitted across the space(col 4 line 15-18)

15. As per claim 16, Jones teaches an electronic money information transaction system according to claim 15, wherein the information signal to be transmitted across the space is a control signal for switching the switching means at least once.(col 4 lines 15-31)

16. As per claim 17, Jones teaches an electronic money information transaction system according to claim 15, wherein the information signal to be transmitted across the space is a control signal for controlling the data modulating-demodulating means(col 4 lines 2-31)

17. As per claim 18, Jones teaches an electronic money information transaction system according to claim 15, wherein the information signal to be transmitted across the space is a signal for communicating the results of operations carried out by the data modulating-demodulating means to the control means(col 4 lines 6-31)

18. As per claim 19, Jones teaches an electronic money information transaction system according to claim 15, wherein the information signal to be transmitted across the space includes the money information read from the IC card(col 4 lines 6-15)

19. As per claim 20, Jones teaches a terminal device for use in an electronic money information transaction system comprising:

an IC card storing electronic money information(col 5 lines 41-42)

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a terminal unit for writing electronic money information into and reading electronic money information from the IC card(col 4, lines 14-18)

a data modulating-demodulating means having a first connection terminal connected to a communication line connected to an external apparatus(col 4 lines 10-14)

a data processing means for processing electronic money information read from or to be written into the IC card(col 4 lines 32-44)

a switching means for selectively connecting a second connection terminal of the modulating-demodulating means to the data processing means or an external information processing means(col 5 lines 36-52)

characterized by comprising a data processing means for processing electronic money information read from or to be written into the IC card; an information processing means connected to the data processing means; a switching means for switchnigly selecting the information processing means or an external information processing means; a data modulating-demodulating means having a first connection terminal connected to a communication line, and a second terminal connected to the switching means, and capable of being selectively connected to the data processing means or the external information processor by the switching means and a data monitoring means for monitoring the output of the data modulating-demodulating means when the data modulating-demodulating means is connected to the external information processor;(col 5 lines 39-44)

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Wherein the information processing means controls operations for writing an information signal indicating the electronic money information into or reading the same from the IC card through the data processing means, the switching means and the data modulating-demodulating means and the information processing means controls the switching means on the basis of result of a monitoring operation of the data monitoring means(col 5 line 53-61)

20. As per claim 21, Jones teaches an electronic money information transaction method to be carried by an electronic money information transaction system comprising:

An IC card storing electronic money information(col 2 lines 37-47)

A terminal unit for writing electronic money information into and reading electronic money information from the IC card(col 5 line 41-52)

A data modulating-demodulating means having a first connection terminal connected to a communication line connected to an external system apparatus(col 4 lines 6-13)

A data processing means for processing electronic money information read from or to be written into the IC card(col 5 lines 53-55)

A switching means for selectively connecting a second connection terminal of the modulating-demodulating means to the data processing means or an external information processing means(col 5 lines 36-55)

Characterized in that said terminal unit comprises a data processing means for processing electronic money information read from or to be written into the IC cards; an information processing means connected to the data processing means; a switching means for switchingly

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selecting the information processing means or an external information processing means; a data modulating-demodulating means having a first connection terminal connected to the communication line, and a second terminal connected to the switching means and capable of being selectively connected to the data processing means or the external information processor by the switching means; and a data modulating-demodulating means when the data modulating-demodulating means is connected to the external information processor; wherein the information processing means controls operations for writing an information signal indicating the electronic money information into or reading the same from the IC card through the data processing system and a signal instructing the switching control of the switching means is transmitted at least once by the communication line and the electronic money information transacting method has the step of making a decision according to at least an instruction provided by the control means as to whether electronic information applied to the second terminal of the data modulating-demodulating means is to be transferred to the external information processor or is to be transferred to the data processing means and enables the system apparatus and the IC card exchange electronic money information through the communication line.(col 9 lines 26-47)

21. As per claim 22, Jones teaches an electronic money information transacting method according to claim 21, wherein the data monitoring means receives and deciphers an output signal of the data modulating-demodulating means, and is a step of deciding whether electronic information provided on the terminal of the data modulating-demodulating means is to be transferred to the external information processor or to be transferred to the data processing means(col 4 lines 6-31)

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Claim Rejections - 35 USC § 103

22 .The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 6 is rejected under 35 U.S. C. 103(a) as being unpatentable over Jones et. al.(US Pat No. 5,623,547).

23. As per claim 6, Jones fails to teach an electronic money information transaction system according to claim 4 further comprising a power receiving means for receiving power from an external power source wherein the electric power storage means is charged through the power receiving means. Official notice is taken that an electronic system such as the one designated here comprises a power receiving means for receiving power from an external power source. It would have been obvious to one skilled in the art at the time the invention was made to incorporate a power means, the motivation to energize the system.

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Claim Rejections - 35 USC § 103

24. Claims 5, 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jones et. al in view of Benton et. al(US Pat. No 4,454,414).

25. As per claim 5, Benton teaches an electronic money information transaction system according to claim 4, wherein the electric energy storage means is charged through the communication line.(col 4 lines 23-42). It would have been obvious to one skilled in the art at the time of the invention to employ an energy storage means through the communication line. The motivation for this methodology would be to achieve low power dissipation, and low line losses.

26. As per claim 8, Jones fails to teach an electronic money information transaction system according to claim 1 further comprising a light emitting means capable of generating light instruction signals and combined with the external information processor, and a light receiving means capable of receiving the light instruction signals and combined with the terminal unit. Benton teaches an optically coupled, portable module funds transaction system.(col 2 lines 27-37). It would have been obvious to one skilled in the art at the time of the invention to combine Jones in view of Benton to teach an electronic money information transaction system further comprising a light emitting means capable of generating light instruction signals and combined with the external information processor, and light receiving means capable of receiving

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the light instruction signals. The motivation to combine these means is for greater systems convenience and reliability. Using a light emitting means capable of generating light instruction signals and combined with the external information processor, and light receiving means capable of receiving the light instruction signals and combined with the terminal unit. (col 2 lines 38-44)

27. As per claim 9, Benton teaches an electronic money information transaction system according to claim 8 further comprising an input means for entering instructions to the control means combined with the terminal unit, at least an electronic money information transaction start requesting means combined with the light receiving means (col 2 line 54-col 3 line 7). It would have been obvious to one skilled in the art at the time of the invention to utilize this system. The motivation would be for greater reliability and convenience as opposed to utilization with an electrical connection and its consequent intermittent failures and reduced versatility.

Conclusion

28. The prior art made of record and not relied upon is considered pertinent to applicant's claims:

- Halpern et. al teaches an electronic money purse and fund transfer system
- Kawan et. al. teaches a wireless transaction and information system
- Brachtel et. al. teaches a transaction security system
- Pitroda et. al. teaches a universal electronic transaction card including receipt storage and system and methods of conducting electronic transactions

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-Hopkins et. al teaches a remote financial transaction system

-Benton et. al teaches an electronic funds transfer and voucher issue system(Pat. 4341951)

Any questions regarding this communication should be addressed to Dr. Geoffrey Akers whose telephone number is (703)-306-5844. The examiner can be reached Monday-Thursday from 6:30 AM to 5:00 PM. If attempts to reach the examiner are unsuccessful, the examiner's supervisor, Allen MacDonald, can be reached at (703)-305-9708.

GRA

February 8, 2000


ERIC W. STAMBER
PRIMARY EXAMINER